



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,222	01/14/2004	John David Kaewell JR.	I-1-0064.5US	3792

24374 7590 11/12/2008

VOLPE AND KOENIG, P.C.  
DEPT. ICC  
UNITED PLAZA, SUITE 1600  
30 SOUTH 17TH STREET  
PHILADELPHIA, PA 19103

EXAMINER
----------

CHEN, JUNPENG

ART UNIT	PAPER NUMBER
----------	--------------

2618

MAIL DATE	DELIVERY MODE
-----------	---------------

11/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/757,222	<b>Applicant(s)</b> KAEWELL ET AL.	
	<b>Examiner</b> JUNPENG CHEN	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to applicant's request of Continued Examination (RCE) filed on 10/30/2008 on amendments/arguments filed on 10/30/2008. Claims 1-8 have been canceled. Claims 9-39 have been added. Currently, claims 9-39 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 9-39 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. **Claim 27** is objected to because of the following informalities:

a) On **line 1** of **claim 27**, replace "13" with --23-- ;

Appropriate correction is required.

### ***Response to Amendments***

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 9-39** are rejected under 35 U.S.C. 102(b) as being anticipated by Wieczorek et al. (U.S. Patent 5,150,361).

Consider **claim 9**, Wieczorek discloses a time division multiple access (TDMA) wireless subscriber unit comprising:

a plurality of circuit components configured to operate in a plurality of signal processing states, each of the plurality of signal processing states having a power consumption level for each of the plurality of circuit components on a call state basis (read as only the essential elements are powered up during particular states/time slots, i.e. receiver 301, A/D 306, Vo-Coder 308, transmitter 324 and D/A 322 are powered up only needed to, col. 4 with line 24 to col. 5 with line 49); and a power interface circuit coupled to the plurality of circuit components configured to provide the power consumption levels (read as battery saver 351, Figure 3); wherein at least one of the plurality of circuit components transitions among the plurality of signal processing states based on a time slot of a TDMA frame assigned to the TDMA wireless subscriber unit (read as the D/A 322, col. 4 with lines 24-27).

Consider **claim 19**, Wieczorek discloses a method for use in a time division multiple access (TDMA) wireless subscriber unit, the method comprising: synchronizing phase with a received signal (read as the synchronization signal 310, controller 320 and synthesizer 334, Figure 3, col. 4 with lines 1-63); operating a plurality of circuit components according to a plurality of signal processing states, each of the plurality of signal processing states having a power consumption level for each of the plurality of circuit components on a call state basis (read as only the essential elements are powered up during particular states/time slots, i.e. receiver 301, A/D 306, Vo-Coder 308, transmitter 324 and D/A 322 are powered up only needed to, col. 4 with line 24 to

Art Unit: 2618

col. 5 with line 49); transitioning at least one of the plurality of circuit components among the plurality of signal processing states based on a time slot of a TDMA frame assigned to the TDMA wireless subscriber unit (read as the D/A 322, col. 4 with lines 24-27).

Consider **claim 29**, Wieczorek discloses a processor comprising: a power interface circuit configured to power a plurality of circuit components that operate in a plurality of signal processing states, each of the plurality of signal processing states having a power consumption level for each of the plurality of circuit components on a call state basis (read as battery saver 351 allows only the essential elements are powered up during particular states/time slots, i.e. receiver 301, A/D 306, Vo-Coder 308, transmitter 324 and D/A 322 are powered up only needed to, col. 4 with line 24 to col. 5 with line 49); wherein at least one of the plurality of circuit components transitions among the plurality of signal processing states based on a time slot of a TDMA frame (read as the D/A 322, col. 4 with lines 24-27).

Consider **claims 10, 20 and 30, as applied to claims 9, 19 and 29 above respectively**, Wieczorek discloses a plurality of clocks, wherein one of the plurality of clocks is selected for each of the plurality of circuit components based on a current one of the plurality of signal processing states (read as the various clock signals, including but not limited to a TDM frame clock, slot clock, and data symbol clock that also exist in the RF communication units in Figure 3, col. 2 with lines 60-57).

Consider **claims 11, 21 and 31, as applied to claim 10, 20 and 30 above respectively**, Wieczorek discloses wherein the plurality of clocks is produced by a software controlled register coupled to the plurality of circuit components (read as

Art Unit: 2618

controller 320 inherently having software in it to process instructions to operate the communication unit, Figure 3, col. 4 with 39-66).

Consider **claims, 12, 22 and 32, as applied to claims 9, 19 and 29 above respectively**, Wieczorek discloses wherein at least one of the plurality of signal processing states includes a reduced power sub-state (read as, i.e. the controller greatly reduces the speed of its own operation, col. 4 with lines 57-60).

Consider **claims 13, 23 and 33, as applied to claims 9, 19 and 29 above respectively**, Wieczorek discloses wherein the plurality of signal processing states include an off state, a sleep state, and an active states (read as the states when unit is off, in power saving/sleep mode, and active mode, col. 4 with line 24 to col. 5 with line 49).

Consider **claims 14, 24 and 34, as applied to claims 13, 23 and 33 above respectively**, Wieczorek discloses wherein the sleep state includes retaining operating state information to resume processing in response to a transition to the active state (read as the controller 320 maintains operating and reduces its speed of its operation during power saving mode, col. 4 with lines 57-60).

Consider **claims 15, 25 and 35, as applied to claims 9, 19 and 29 above respectively**, Wieczorek discloses wherein at least one of the plurality of circuit components are selectively power down during a call connection (read transmitter 324 is deactivated unless the communication unit is transmitting, col. 4 with lines 24-30).

Consider **claims 16, 26 and 36, as applied to claims 9, 19 and 29 above respectively**, Wieczorek discloses wherein the plurality of circuit components are

Art Unit: 2618

selectively powered responsive to a radio control channel timeslot to determine if there is call traffic or a traffic channel assigned to the TDMA wireless subscriber unit (read as the re-activation of the circuit in the receiving section, col. 4 with line 60 to col. 5 with line 49).

Consider **claims 17, 27 and 37, as applied to claim 13, 23 and 29 above respectively**, Wieczorek discloses wherein the active state includes a portion of the plurality of circuit components in a powered state during a predetermined time slot (read as the re-active state, col. 4 with line 24 to col. 5 with line 49).

Consider **claims 18, 28 and 38, as applied to claims 9, 19 and 29 above respectively**, Wieczorek discloses wherein one of the plurality of circuit components transitions between at least two power consumption states during any single time slot (read as the use of duplexer to allow both of the receiving and transmitting sections to operate simultaneously, col. 4 with lines 37-38).

Consider **claim 39, as applied to claim 29 above**, Wieczorek discloses wherein at least one of the plurality of circuit components is collocated with the processor (read as Figure 3)

### ***Conclusion***

5. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Art Unit: 2618

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junpeng Chen whose telephone number is (571) 270-1112. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Junpeng Chen  
J.C./jc

/Edward Urban/

Supervisory Patent Examiner, Art Unit 2618